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THE RELATIONSHIP BETWEEN PERSONALITY TRAITS
AND TRANSFORMATIONAL LEADERSHIP
AMONG NORTH CAROLINA ELEMENTARY
PUBLIC SCHOOL PRINCIPALS

A Dissertation
Presented to
the Faculty of the Department of Educational Leadership
and Policy Analysis
East Tennessee State University

In Partial Fulfillment
of the Requirement for the Degree
Doctor of Education
in Educational Leadership and Policy Analysis

by
Robert J. McGrattan
May 1997

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APPROVAL

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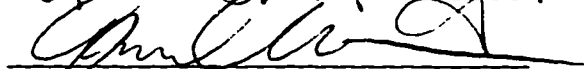
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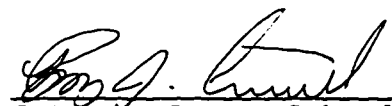
The committee read and examined his dissertation,
supervised his defense of it in an oral examination, and
decided to recommend that his study be submitted to the
Graduate Council, in partial fulfillment of the
requirements for the degree of Doctor of Education in
Educational Leadership and Policy Analysis.


Chair, Graduate Committee



Signed on behalf of
the Graduate Council


Interim Dean, School of
Graduate Studies

ABSTRACT

THE RELATIONSHIP BETWEEN PERSONALITY TRAITS AND TRANSFORMATIONAL LEADERSHIP AMONG NORTH CAROLINA ELEMENTARY PUBLIC SCHOOL PRINCIPALS

by

Robert J. McGrattan

This study examines the relationship between personality traits as identified by the Myers-Briggs Type Indicator and transformational leadership as measured by The Nature of School Leadership. The subjects were 74 North Carolina public school elementary principals. The principals completed the MBTI. Principals also provided pertinent demographic information. Selected teachers in each school were asked to give their perception of the principal as a transformational leader by completing The Nature of School Leadership. Data were analyzed to look for significant relationships between personality and demographics as they related to transformational leadership.

The analysis of demographic information yielded gender as a significant factor in transformational leadership. Females were found to have a significantly higher mean score on The Nature of School Leadership. The bipolar MBTI traits of introvert/extrovert, intuitive/sensate, thinking/feeling, and judging/perceiving were analyzed, and the thinking/feeling trait was found to be a significant factor in transformational leadership. A predisposition toward the thinking trait tended to produce higher scores on the transformational leadership scale.

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DEDICATION

This dissertation is dedicated to my
loving and supportive family: wife, Barbara;
sons, Kevin, Michael, and Robby.

I also thank my parents for their help and support.
This dissertation is also dedicated to the memory of
Mrs. Francine Delany, principal and mentor, who
urged me to seek a doctorate degree as her last
request.

ACKNOWLEDGEMENTS

There are number of special people to whom I am greatly indebted for their assistance in the completion of this study. First, I am grateful for the support and assistance provided by my dissertation committee--namely, Marie Somers-Hill, Russell West, Louise MacKay, and Andrea Clements. In particular I am appreciative to Dr. Hill as my committee chair. She and I kept a regular e-mail dialogue going that kept this study moving forward. Her support and quick responses to my queries assisted me in the timely completion of this project.

I want to also thank Dr. Ken Sanchagrin, professor at Mars Hill College, and Dr. William Sabo, professor at The University of North Carolina at Asheville, for their assistance in helping me to better understand statistical procedures.

Finally, I want to acknowledge Dr. Kenneth Leithwood for his generosity in allowing me to use The Nature of School Leadership in this study.

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CHAPTER 1

INTRODUCTION

There is no shortage of individuals and groups in the United States calling for the reform of public schools. Issues such as school violence, academic achievement, work preparedness, and economic competitiveness are just a few of the issues that make headlines today. With the publication of Restructuring American Education (1972), Rist called for reform, but was largely ignored (Reavis & Griffith, 1992). Since that time the Congress, recent presidents (Ronald Reagan, George Bush and Bill Clinton), governors, and state legislators have participated in the reform dialogue. Even after all these efforts, American public schools look very much like schools of 10, 20, or even 100 years ago.

Why is it so difficult to make significant changes in American public schools? One reason may be parents of school children do not want to see major changes in their children's schools. Many of the Phi Delta Kappan/Gallup annual polls about education find that parents see major problems in education in general, and at "other" schools they hear about, but not in their own children's schools.

People continue to rate the schools in their own communities much higher than they rate the nation's schools. And the closer people get to the schools, the higher the ratings. Almost two-thirds (65%) of

public school parents assign a grade of A or B to the school their oldest child attends. (Elam & Rose, 1995, p. 41)

In a recent poll in Western North Carolina called "Your Voice, Your Vote," the pollsters revealed that 55% of those interviewed gave their schools an A or B, while only 14% gave them a D or F. They also stated that parents tended to be more favorable toward schools than nonparents (Morrill & Ahearn, 1996).

One reason for this contradiction is that most people do not want reform to take place in their child's school because they equate reform with experimentation. No one wants schools to experiment with his or her child (Goens & Clover, 1991). Therefore school parents have been content with principals who are good managers; leaders who maintain the status quo.

Another reason reform has not happened is because there has been no clear vision about what schools ought to be like. Many reform movements are underway in the United States today. Foxfire, The Coalition of Essential Schools, the League of Professional Schools, the Accelerated Schools, and nearly 30 other movements operate in various stages of seeking change within traditional models of schooling (Hill & McGrattan, 1996). A lack of focus can leave those at the local level intimidated about which direction to take--especially when one realizes there are very few "tried and true" reform measures to implement.

Added to the reform movement is the latest "buzzword" in education--restructuring (Berends & King, 1994).

Restructuring takes demands for reform and brings them to a level deeper than just making small changes within the present structure of schooling. Restructuring, according to Reavis and Griffith (1992), calls for "a complete change in culture, organizational assumptions, leadership, curriculum, instructional approach, and accountability of the school" (p. 2). Brandt (1993) says, "Restructuring is changing the system of rules, roles, and relationships that govern the way time, people, space, knowledge, and technology are used and deployed" (p. 8). To many, restructuring is systemic change aimed at changing the culture of American public schools.

Who will lead this systemic change in schools? American business and political leaders have not been successful in bringing about a restructured school system, even though restructuring has such diverse advocates as David Kearns of the Xerox Corporation, Albert Shanker of the American Federation of Teachers, and a host of governors, presidents, and legislators (Reavis & Griffith, 1992). What appears to be lacking in the movement toward restructuring is a catalyst to focus change.

The school principal is in position to be the key player in this restructuring movement. Legislative reforms commonly are aimed at freeing local schools to

make decisions that affect their students. Federal, state, and district mandates and regulations are being relaxed to allow more school based decision making. This places the school principal in a strategic role.

Is the school principal ready for such a role? Historically, the school principal has functioned in a role much more akin to a manager than a change agent. Hiring was based on finding keepers of the status quo, good organizers, and fiscal managers for schools, rather than change agents. The school principal has served as defender of the status quo. Principals have often interpreted their role as articulating the policies and procedures of those higher in the bureaucracy to those over whom they have authority (their school staffs). In effect, principals protected the bureaucracy. Leithwood, Begley and Cousins (1992) refer to this as a socially constructed role. Those who wished to act otherwise either were not attracted to the principalship, or did not last long in it.

The clarion call today, however, is for principals to be change facilitators, visionaries, and leaders. This is a role for which many principals have not been trained, and are not comfortable fulfilling. Leithwood et al. (1992) clarify,

Recently, expectations have changed at a sufficiently rapid rate to create incompetence among some of those with long tenure in the role. That is, at some point earlier in their careers, the

performance of these people matched the socially determined expectations for exemplary school leadership. But the social ground shifted from under them and they did not shift with it. When planned change is defined as a process of reducing the gap between current and desired states, sometimes you have to run hard to stay in the same place. This happens when the desired state changes faster than you do. Under such circumstances, if you only amble forward, you actually lose ground! (p. 11)

They further explain this new principalship role by using the metaphor of a leader of a marching band. Under the old paradigm, school leaders were seen to be out in front of their "band"--using their positional authority to maintain that role. However, Leithwood et al. (1992) question whether this is the way principals of restructured schools should lead.

Having a vision of what they would like their schools to be in the future is critical for school-leaders; it may even put them in front of the band. But it is (among other things) the creation of a shared vision among those playing the instruments that determines what song is being played, and whether it is one or many. With this as a critical task, it is reasonable to ask whether the front of the band is the best place for the leader to be. Our conception of leadership required for future schools suggests that the rear of the band and the midst of the band will offer opportunities that are at least equally important as opportunities at the front. (p. 6)

What are these qualities that enable school leaders to lead from the middle or the rear of the band? Further, if one could look for these qualities in new school principals, would the restructuring movement be hastened?

Many of the qualities needed for this new paradigm are remarkably similar to those who are called

transformational leaders. Transformational leaders are those who seek to "transform" the culture of an organization, while still attending to day-to-day events which arise. Murphy and Louis (1994) found that creating a vision and building consensus toward the goals needed to reach that vision were the two most critical elements of transformational leadership. Leithwood, Jantzi, Silins, and Dart (1993) conclude that transformational leadership practices enable teachers to support and be committed to school restructuring efforts.

Statement of the Problem

School reform efforts have not taken place to any great extent in public education. Even though many educational writers are calling for a restructuring of public schools, schools still bear a close resemblance to the schools of previous generations. Sarason (1991) calls this the "intractability" of schools. Goodlad (1996) laments that the major lesson learned from reform movements is there are no "quick fixes." Hill and McGrattan (1996) see this as a lack of "fit" between student needs of today's generation and the schools' organizational structures.

Early reform efforts were aimed at closing this gap through state-mandated curricula, merit pay, and increased teacher accountability. Later reform movements sought to empower those closest to the students--the

teachers--stressing teacher professionalism and shared decision making (Bacharach, 1990). Still seeing no appreciable change in schools or achievement, some now are calling for changing the deep structures of schools. Miles and Ekholm coined the phrase, "third wave" change to describe these deep structure changes (Prestine & Bowen, 1993). Third wave reform efforts, according to Prestine and Bowen (1993), are focused on significant and substantial change. This change affects the teaching/learning process, the governance of the school, and "roles, relationships, beliefs and understandings (p. 298)." Since schools continue to be impervious to reform, how might we best bring about the desired changes? If qualities of successful change agents could be defined, could school leaders be chosen who would possess the necessary skills to bring about the desired changes?

Purpose of the Study

The purpose of this study was to examine the relationship between personality traits of principals, and the extent to which they are perceived to be transformational leaders. This study investigated the personality traits of North Carolina elementary school principals who had taken the Myers-Briggs Type Indicator (MBTI) to see if there was any relationship between the eight traits of the MBTI: introvert-extrovert, intuitive-sensate, thinking-feeling, and judging-perceiving; and

the degree of transformational leadership exhibited by principals. Further, this study explored the relationship among the eight MBTI traits and the qualities needed by transformational leaders. Five teachers in each selected school were also asked to complete The Nature of School Leadership scale (see Appendix A) to assess the extent that their principal could be described as a transformational leader. For purposes of this study, a transformational leader is one who fosters a more collaborative and inclusive model of school governance, organization and management; one whose purpose in leading develops a shared vision for the school, builds consensus about school goals and priorities, and holds high performance expectations for the staff and students; and one who models expected behavior, provides individualized support and intellectual stimulation for the staff (Centre for Leadership Development, 1995).

Research Questions

This study explored the relationships between the personality of the principal and the extent to which she/he is perceived to be a transformational leader by seeking answers to these research questions:

1. In the selected sample of North Carolina principals, what percentages are there of each MBTI type, and is

there a significant difference between the sample and other groups of principals who have taken the MBTI?

2. Of the 16 MBTI personality types are there some types who score higher on The Nature of School Leadership that may indicate they possess transformational leadership skills?

3. Is there a relationship between the MBTI bipolar personality traits and transformational leadership as measured by scores on The Nature of School Leadership?

4. Are any of the demographic variables, namely years at present school, age, gender, years in education, highest education level, and school size, significantly related to scores on The Nature of School Leadership?

Hypotheses

The following null hypotheses will be tested at the .05 level of significance:

1. There is no significant difference in the proportion of the 16 Myers-Briggs Personality Types of North Carolina elementary school principals and other groups of principals who have taken the MBTI.

2. There is no significant difference among The Nature of School Leadership mean scores and the 16 Myers-Briggs Personality Types.

3. There is no relationship between any of the four Myers-Briggs bipolar continuum scores of personality

traits of North Carolina elementary principals and total score of transformational leadership.

4. There is no significant relationship among demographic factors, four bipolar continuum scores of personality traits, and total score of transformational leadership.

Significance of the Problem

Placing appropriate people in leadership positions in local schools is critical to the success of schools (Coleman, 1994). The gap between the expectations for public school graduates and the performance of public school graduates is widening. Many leaders are voicing concern as to whether public school graduates will be able to compete successfully in the 21st century. Presidents have made speeches, legislators have passed laws, governors have touted goals, but schools have not made significant changes. The issue of leadership is crucial.

As principals are trained and hired, it seems imperative that those individuals be selected who can be transformational leaders if schools are to make fundamental changes. Schools need leaders and not managers, because managers work within the established culture while transformational leaders transform the culture (Bass, 1985). Bass asserts that personality is more critical to transformational leaders than to transactional (or managerial) leaders. If certain

personality traits of elementary principals can predict the potential for being a transformational leader, then districts and superintendents can be more selective in hiring elementary principals.

Limitations

This study was limited to elementary principals of public schools in North Carolina. These findings were also dependent on a self-report measure, the Myers-Briggs Type Indicator. The MBTI is limited as a predictive instrument; it has not been validated as such. The instrument can only describe the preferences of a person at the time they took the instrument. Also the use of The Nature of School Leadership scale to measure the principal as transformational leader is limited to the perceptions of five teachers within a school. The reliability of this instrument has not been documented.

Definitions

Myers-Briggs Personality Type Indicator

The Myers-Briggs Personality Type Indicator is a measure of personality written by Katherine Briggs and Isabel Myers. It is published by Consulting Psychologists Press, Incorporated. (No reproduction of this instrument is allowed by the publisher.) The measure is based on the work of Carl Jung, a Swiss psychiatrist, and measures personality preferences.

Personality Type

In MBTI terminology, personality type refers to a four letter designation of one's personality preference. These represent a combination of the bipolar preferences extrovert or introvert (E/I), sensate or intuitive (S/N), thinking or feeling (T/F) and judging or perceiving (J/P). The four strongest preferences in each of the four categories are combined to become a "type" (such as ESTJ). In combination, there are 16 possible types.

Personality Trait

In MBTI terminology, trait refers to the bipolar preferences of introvert/extrovert, sensate/intuitive, thinking/feeling, and judging/perceiving. Hirsh and Kummerow (1989) delegate the traits of extraversion and intraversion to the energizing preference, sensing and intuition to the attending preference, thinking and feeling to the deciding preference, and judgment and perception to the living preference.

Personality Dimension

In MBTI terminology, dimension refers to individual personality attributes such as extraversion, intraversion, intuitiveness, sensate, thinking, feeling, judging and perceiving. In reference to a dimension, personality can be described using one or a combination of these factors. For example, an intuitive thinker (NT)

is an example of a personality dimension as well as just describing someone as an extravert (E).

The Nature of School Leadership

This instrument was devised by the Centre for Leadership Development at the Ontario Institute for Studies in Education and has only been used informally, mostly as a research tool for graduate studies. Permission to use this instrument was granted by Dr. Kenneth Leithwood (see Appendix A). The instrument seeks to measure: a) the leader's understanding of leadership, b) the leader's effectiveness in his/her dealings with people, c) how the leader strengthens school culture and d) if the leader builds collaborative structures. The instrument is a questionnaire to be completed by those who work under a leader.

Overview of the Study

This study is composed of five chapters. Chapter One is the introductory chapter containing the statement of the problem, the purpose of the study, the research questions, the significance of the problem, the limitations of the study, definition of terms, and this overview. Chapter Two contains the review of related research. Chapter Three contains a description of the population, the sampling method, the design of the study, the methods of data collection, and the methods of data

analysis. Chapter Four contains a description of the data obtained, discusses how the data were prepared for analysis, and presents the analysis of the data. Chapter Five contains a discussion of the summary findings, conclusions, and recommendations.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Introduction

This study involved an investigation of school leadership in the context of transformational leadership and the personality traits of principals.

Transformational leadership can be assessed by its effect, namely the amount of school reform that has occurred (i.e. restructuring a school). It can also be assessed by studying the amount of change that has occurred in a school. Therefore both of these factors, restructuring schools and implementing change, are reviewed in the research literature.

In the review of related research literature, this chapter is divided into five sections, each focusing on a topic related to the major themes. Section one explores literature pertaining to restructuring schools; section two explores the conditions of implementing change; section three explores transformational leadership; section four explores the personality type of principals; and section five explores the Myers-Briggs 16 personality types and their corresponding traits of leadership.

Restructuring Schools

Clear agreement is lacking among educators as to what are restructured schools because of a lack of precision in the use of the term restructuring (Newmann & Wehlage 1995; Schlechty, 1990). Although restructuring is related to reforming schools, for most authors it means something deeper, more profound. Some authors have offered metaphors to help understand restructuring. Brandt (1990) compared restructuring to an event as major as a factory discarding the assembly line model. Donaldson (1993) stated, "Teachers and principals commonly compare their restructuring efforts to 'rebuilding a 747 while it's in the air'" (p. 12).

The literature does show some common threads within the writings about restructuring. The elements of site-based management and teacher empowerment are strands commonly found (Goldman, Dunlap, & Conley 1993; Hallinger, 1992; Leithwood, 1992). Others discussed the transformation of the teaching/learning process (Goldman et al.; Hallinger, 1992; Reavis & Griffith, 1992). A complete change in school culture is also cited as a prerequisite for school restructuring (Berends & King, 1994; Brandt, 1993; Hallinger, 1992; O'Neil, 1990; Reavis & Griffith, 1992.).

However it is defined, restructuring is now called the "third wave" of educational reform focusing on

significant and substantial change (Coleman, 1994; Prestine & Bowen, 1993). The "first wave" of educational reform began in the Reagan years and stressed excellence (Bacharach, 1990; O'Neil, 1993). During that time the federal government pressured states to pass laws that would centralize power and authority at the state level. This, in effect, looked like decentralization because the federal government was encouraging state control, but the real effect was that it limited local control. States took a strong stance in emphasizing accountability and achievement. Teachers were required to show achievement using a state mandated curriculum, but they also shouldered the blame if their students did not succeed. In this first wave of reform, teachers were left entirely out of the decision making process (Bacharach, 1990).

The second wave of reform began in the mid- to late-1980s with an emphasis on decentralization and the empowerment of teachers. Because the states had mandated about all they could and still no significant improvement was evident in public education, the emphasis shifted. Policy makers had blamed educators for the lack of reform, while educators blamed the policy makers for their lack of understanding about what life is really like inside schools (Clark & Astuto, 1994). Teachers began to show their discontent with mandated reforms from the state level.

Emphasis in the second wave of reform was on flexibility and diversity. Reform in the second wave was directed at districts and individual schools. "Out of this, the teacher empowerment movement was born, emphasizing such issues as professionalism, collegiality, shared decision making, and consensus management" (Bacharach, 1990, p.5).

The 1986 Carnegie Forum on Education and the Economy report called for restructuring the schools to provide a professional environment; restructuring the nature of the teaching force; revising the recruitment, education, and induction of teachers; making salary and career opportunities market competitive; relating incentives to schoolwide performance; and providing the technology, services, and staff needed for teacher productivity. Some reviewers see this report as a prototype for the 'second wave of reform,' a blueprint for stimulating change at the local level by involving those persons who deliver education and schooling. (Passow, 1990, p. 17)

Most states are still emphasizing second wave reforms. North Carolina, in 1996, enacted the ABC's of Public Education that places more authority for decisions at the local level. At the same time local schools and individual teachers are held accountable to show that their students "show a year's worth of growth for a year's worth of schooling" (North Carolina School Boards Association, 1996, p. 1).

The third wave of educational reform is now being proposed because the gap has become too great between what those outside of education are demanding and what those inside education are delivering. The state-led

initiatives for reform in the 1980s have now resulted in the movement for systemic change in the 1990s (O'Neil, 1993). There seems little else to do than to create radical reform or transformation (Bolman & Deal, 1991; Goens & Clover, 1991). Elmore (1990) states our public schools cannot continue as they are because they are not meeting the needs of the students or of society. Motives for restructuring schools include: 1) helping the economy, 2) bringing justice and equality of opportunity, and 3) attracting more quality teachers (Elmore, 1990).

Since a precise definition of restructuring is lacking, it is helpful to look at the characteristics of restructured schools. Differences exist among leading authors and educators as to what a restructured school should look like. "Like the proverbial blind men trying to describe an elephant, educators who feel around for a definition of the latest stage of reform of schools--restructuring--see the situation differently" (Lewis, 1989, p. 1).

Berends and King (1994) presented a study in which over 200 schools were nominated by contacting 6000 people and asking them to name a school that was a good example of a restructured school. After the initial nominations the researchers sent questionnaires to the principals of these 200 schools and found that only 159 of the principals described their schools as examples of restructuring. After measuring these schools by the

criteria they developed and visiting the schools, Berends and King concluded that only 18% of the 159 schools were really restructured. They worried that restructuring has become a "buzzword" rather than meaning a radical reorganization of schools.

Reavis and Griffith (1992) stated, "There is no single formula for restructuring" (p. 353). Instead they suggested that four guidelines be followed when restructuring. They include: 1) begin with the teaching/learning process, 2) see restructuring as a process, 3) develop school-specific approaches, and 4) work systemically.

A review of the literature suggested that the list below are criteria that may be included in describing a restructured school. Further, restructuring most likely means that a combination of these factors are present in a school. Elements of a restructured school can include (a) site-based management (Hallinger, 1992; Newmann & Wehlage, 1995; Oswald, 1996; Prestine & Bowen, 1993), (b) a change in the teaching/learning process or curriculum reform (Anderson, 1993; Lewis, 1989; O'Neil, 1990; Oswald, 1996; Reavis & Griffith, 1992), (c) increased teacher empowerment and professionalism (Hallinger, 1992; Keller, 1995; Oswald, 1996; Sackney & Dibsiki, 1994; Wohlstetter & Briggs, 1994), (d) increased community involvement (Oswald, 1996), (e) a central vision (Anderson, 1993; Keller, 1995; Lewis, 1989; Miles &

Lewis, 1990;), (f) a less bureaucratic structure (Beck & Murphy, 1993; Hallinger, 1992; Lewis, 1989; Newmann & Wehlage, 1995; O'Neil, 1990), (g) parental choice of schools (Newmann & Wehlage, 1995; Reavis & Griffith, 1992), (h) integrated use of technology (Reavis & Griffith, 1992), (i) authentic student assessment (Newmann & Wehlage, 1995; Reavis & Griffith, 1992; Sa, 1992; O'Neil 1990), (j) active learning (Lewis, 1989; Reavis & Griffith, 1992), (k) flexible grouping and scheduling (Newmann & Wehlage, 1995; Sa, 1992), and (l) teacher teaming for instruction (Newmann & Wehlage, 1995).

Implementing Change

The systemic changes suggested by the school restructuring literature cannot be achieved overnight. One nationwide school restructuring movement, The Essential Schools, has research to show that it takes from two to eight years for restructuring to take place. The Essential Schools movement looks at four benchmarks of change (a) substantial agreement, (b) observable change, (c) all school participation, and (d) systemic leadership. The leaders of this movement believe that most everyone in a school must agree that a change is needed; they must agree to participate in the change; they must share in the leadership roles of the changed

organization; and they must make changes that are visibly apparent (Prestine & Bowen, 1993).

Evans (1993) paraphrased a quote from Samuel Johnson to address the cyclical nature of change. Johnson described a second marriage as the triumph of hope over experience. In a similar fashion Evans sees the track record of change in schools as a dismal one. Evans believes that change will not take place in schools unless the content of the change is valid; teachers are willing and have the capacity to change; and the school organization is strong enough to withstand the pressures of change by providing necessary support, training and leadership.

Heckman (1993) stated,

The culture of a school acts like an invisible hand guiding the thoughts and actions of those inside of schools. Individuals in schools do not spontaneously examine and alter these guidelines nor their actions because their existing action and thought seem sensible. A catalyst is needed to start and sustain change. (p. 266)

Heckman went on to list four conditions that can create change. These are (a) group dialogue, (b) public mindfulness (c) outsiders who question and facilitate dialogue, and (d) enactment of change.

Fullan and Miles (1992) suggested an understanding of the seven orientations of change is necessary to successfully implement change. They see change as a learning process loaded with uncertainty. Change is a

journey and not a blueprint. Those involved with change must see problems as friends not enemies. Change requires a great number of resources and is systemic and implemented locally.

Johnson, Snyder, and Anderson (1992) found work cultures that foster change have these four interdependent traits: (a) school-wide planning, (b) professional development, (c) program development, and (d) school assessment. As the authors worked with schools that were restructuring, they noted these common features: (a) school goals became more "bold", (b) test score goals were "stretched" higher, and (c) principals learned how to let go of some of their authority.

Simpson (1990) looked at elements of a school culture that sustained change. He found that the principal played a key role in setting the stage for change and sustaining it. Simpson discovered that collegiality, empowerment, and a participative/collaborative leadership style were crucial elements in the change process.

According to Evans (1993), restructuring "must be accomplished teacher by teacher, school by school" (p. 19). The most important task for principals to be concerned with is to manage the change and motivate the teachers to do it. Evans concluded that for change to take place, new goals must be worthwhile, staffs must be ready and able to change, schools must be ready and able

to change, and there must be a high level of support for change by the evidence of training and materials.

Another school restructuring movement, The Accelerated Schools, is based on the belief that the road to restructuring is unique for each school. They guide schools to achieve a unity of purpose, provide empowerment with responsibility, and build on the strengths of the school. "The transformation process begins with the school community taking stock, that is, taking a hard look at its present situation, then forging a shared vision of what it wants a school to be" (Keller, 1995, p. 12).

Bolman and Deal (1991) and Anderson (1993) remind reformers that understanding the present situation is also critical to making changes. Bolman and Deal referred to this as the ability to understand the existing organization. They suggested that the new organization will rise from the present one. It is important to understand what is not working so that new structures can be designed. An important element in transitioning to a new structure is vision.

Belasco (1990) also shared this view of the importance of vision. He stated, "A vision focuses and energizes that new tomorrow" (p. 11). He states that leaders can create new tomorrows and that empowerment will create change (p. 6). It then often falls on the

shoulders of the school leader--the principal--to bring about this change.

Transformational Leaders

In a research study commissioned by the Association for Supervision and Curriculum Development in 1983, the researchers found that effective schools were those in which the principal set the tone, direction, and philosophy. These principals observed classrooms often, had a say in hiring teachers, were active in curriculum design, and sought and received staff commitment (Squires, Huitt, & Segars, 1983). The revelation of this research and others like it, led to new expectations for the role of principal. This came to be called instructional leadership. McCurdy (1983) stated that instructional leadership was the "main ingredient in good schools" (p. 19). The idea of principal as leader was beginning to take shape.

Before this time school principals had essentially been relegated to the role of middle manager--the implementer of federal, state, and district policies to the teachers and students. Most parents were quite happy to have principals in this role because they felt safe with managers. Parents did not want schools to "experiment" with their children (Goens & Clover, 1991).

In the traditional concept of schools, principals had been technical managers. They had attended to paperwork,

the physical plant, safety and social control, fiscal management, and responded to district requests. Decision making was centralized to the principal and a few trusted advisors. The principal relied heavily on his or her own experiences and seldom conferred with outside experts (Murphy & Louis, 1994).

However with the emphasis on instructional leadership in the 1980s, the idea of principal as leader started a shift in emphasis. Increasingly principals had to carry out a two-fold job: building manager and instructional leader, without the time to do both well. "As the size, complexity, and regulation of schools has increased, the administrative portion of the principal's role has become more time-consuming and demanding" (Reitzug, 1992).

Sergiovanni (1991) maintained however, that successful principals must continue to balance both the job of manager and that of leader so that they complement one another. Yet, others suggested that one cannot bring about change while trying to preserve the standard operating procedures. To them, the managerial role of the principal is nonleadership (Leithwood et al., 1993).

Just as principals were adjusting to their new role expectation as an instructional leader, our society has moved into an era of rapid change. This has led to a demand that principals be leaders who are also effective change agents. As accountability has moved to the schoolhouse door, it has become clear that principals

must also effectively introduce and manage change to keep their jobs. Barstow (1992) contended that if principals do not assume important leadership roles in schools, then the principalship might be abolished.

Clearly then, it is time to reframe the leadership role in schools. Principals are called upon to be agents of change. They will need a whole new set of skills. The word coined for this new leadership is transformational. Transformational leadership includes instructional leadership but is broader in scope.

Transformational leadership forms a new paradigm that seeks to bring about higher order changes. In this paradigm, the rewards are internal. Communication of a mission is highly important. However, effective transformational leaders must also be able to manage the day-to-day events which arise (Avolio & Bass, 1988). The transformational leader builds vision, gets group consensus on school goals, serves as a role model, provides support to individuals, provides intellectual stimulation, sets high performance expectations, and gives contingent rewards (Murphy & Louis, 1994). Bass (1985) defined transformational leaders as those who "succeed in raising colleagues, subordinates, followers, clients, or constituencies to a greater awareness about the issues of consequence" (p. 17). Kagan (1994) suggested that transformational leadership happens when leaders use their personal traits to raise themselves and

others to new heights of achievement. Finally, Sergiovanni (1990) wrote, "In transformational leadership...leaders and followers are united in the pursuit of higher-level goals common to both" (p. 24).

A transformational leader works in an organizational structure that is much flatter, or more horizontal than the traditional bureaucratic structure. School leadership is broadened to include parents and teachers as well as principals. Hallinger (1992) supported Sergiovanni's claim that principals now ought to be leaders of leaders--where teachers are the leaders of instruction. "School restructuring calls for greater emphasis on problem finding and goal setting by the staff and community" (p. 41). Transformational leaders focus on people rather than on tasks, and they build relationships to get goals accomplished. For transformational leaders, commitment is more important than competence (Mitchell & Tucker, 1992).

Building and articulating a vision throughout the organization is a critical element in transformational leadership (Kagan, 1994; Murphy & Louis, 1994; Wilkes, 1994; Leithwood et al., 1993; Follman, Vedros, & Curry, 1993; Sagor, 1992; Bass, 1985). As a visionary the principal has to dream the dream, enlist support, build teams, build trust, and actively participate in the shaping of the school culture (Wilkes, 1994).

This suggests the need for school leaders, first of all, to attend consciously to the content, strength,

and form of their schools' culture. When aspects of that culture appear not to support change, school leaders should make use of those culture-changing strategies that are now becoming evident in research. (Murphy & Louis, 1994)

Bass (1985) clarified that a manager works within the established culture; a transformational leader transforms the culture. "The transformational leader changes the social warp and woof of reality" (p. 24). "The school is now viewed as that unit responsible for the initiation of change, not just the implementation of change conceived by others" (Hallinger, 1992, p. 40). "Transformational leaders see themselves as more responsible for redefining educational goals than for implementing existing programs" (Mitchell & Tucker, 1992, p. 34).

Goal setting is another critical component of a transformational leader (Hallinger, 1992; Leithwood et al., 1993; Murphy & Louis, 1994; Mitchell & Tucker, 1992; Sergiovanni, 1990). It is closely associated with vision. Goals are the steps going up the ladder of vision. Transformational leaders have to foster these goals and build consensus to reach them (Murphy & Louis; Leithwood et al.). "In restructured schools, the principal must not only assist staff in reaching their own conception of the problems facing the school, but also help generate and develop potentially unique solutions" (Hallinger, 1992, p. 42).

Sergiovanni (1990) stated that goal orientation has the following leadership characteristics: (a) leadership

by building, (b) leadership by bonding, and (c) leadership by banking. In leadership by building, Sergiovanni means that the leader and the led raise their expectations; human potential is aroused. Leadership by bonding means that moral leadership is exercised because the levels of conduct and ethical considerations are raised and the goals of the leader and led become one. Leadership by banking means that energy is conserved for new projects by the leader ministering to the needs of the led.

Another important aspect of the transformational leader is that of role model (Follman et al., 1993; Leithwood et al., 1993; Wilkes, 1994). The transformational principal cannot be someone who stays in the office and sits behind a desk. The type of modeling done by the principal will, to some degree, be determined by the vision, goals, and culture of the school. However there are some behaviors that transcend the situation. According to Wilkes (1994) principals must possess the qualities of honesty, competence, vision, and inspiration; they must communicate their values, demonstrate trust, and provide instructional leadership.

The principal has to model that learning is important. Schools of the 21st century will need to produce students who are life-long learners. As the head learner in the school, the principal will need to interact with students as learners, and intellectually

stimulate the staff (Avolio & Bass, 1988; Leithwood et al., 1993).

Both Follman et al. (1993) and Wilkes (1994) discussed the important roles of enabler and motivator. As an enabler, the principal has to lead and manage, foster collaboration and provide support to those within the school. "In restructured schools, the principal must not only assist staff in reaching their own conception of the problems facing the school, but also help generate and develop potentially unique solutions" (Hallinger, 1992, p. 42). Thus collegiality, experimentation, reflective practice and school-based staff development are important. The principal as motivator has to build morale, encourage professionalism, and recognize achievement with honors, awards and ceremonies (Wilkes, 1994).

As a transformational leader the school principal has to exhibit a whole new set of skills and personality traits. According to Bass (1985) transformational leaders must be thoughtful and introspective. They also must have a high energy level because this type of leadership is fraught with stress and ambiguity. Bass also stated that they need self-confidence and an inner strength to fight for what is right, or good, or not popular. They must be assertive and willing to withstand the pressures to support that which is immediately satisfying to themselves or their colleagues. Schools with these traits

of transformational leaders most often have a climate for success (Sagor, 1992).

Personality Traits and Leadership

Some authors, when defining transformational leadership, spoke in terms of "charisma" (Avolio & Bass, 1988). Charisma, although a personality trait, is difficult to define and measure. Those seeking to define leadership traits generally look for traits that are more definable and measurable. "Whether formal or informal, personality theories attempt to organize observations of people by providing some kind of underlying framework for classifying and describing behavior" (Quenk, 1993, p. 2). For example, Mitchell and Tucker (1992) suggested that transformational leaders need to focus on people rather than on tasks. They build relationships with people to get goals accomplished. Tests that measure a leader's inclination to choose people over tasks, or to work collaboratively with others to achieve a goal, might be used as some of the predictors of transformational leadership.

In the "third wave" of educational reform, called restructuring, Coleman (1994) stated that part of the reform centered on change, change agents, culture, and culture building. Principals, as the focal point of this reform movement, need to have the skills and personalities necessary if this reform is going to move

forward. They will need to have expertise in human relations, group dynamics and community outreach. As stated earlier, they will also need to build and articulate a vision, and be a facilitator of others. The principal will need to see the whole picture and be able to conceptualize about education needs of the future.

Gardner and Martinko (1990) argued that the relationship between personality and leadership can have "important implications for the identification, training, placement, and development of effective leaders" (p. 35). To measure this, they used the Myers-Briggs Type Indicator to measure the preferences of principals and compared them to categories of managerial behavior. Gardner and Martinko found a relationship between high performing principals and personality type.

The Myers-Briggs Type Indicator is a psychological inventory that measures personality traits. Katherine Cook Briggs and Isabel Briggs Myers expanded and elaborated on Carl Jung's theory of personality traits. They studied Jung's ideas and began designing an instrument to make Jung's theory testable and useable (McCaulley, 1990a). By 1941 they had begun constructing the first version of their type indicator (McCaulley, 1990a).

Today the Myers-Briggs Type Indicator is the most widely used psychological inventory in the world. Psychological type is based on the belief that people

have preferences--or preferred ways of doing things. It is based on the work of Jung who had developed a typology to explain personality. For Jung, personality types could be divided among those who were extroverts and those who were introverts. According to Stevens (1990), Jung described extroverts as those who were outgoing and confident in new situations. On the other side, introverts were more cautious, hesitant, and reflective. Further, Jung concluded that people differed also as to whether they were thinking, feeling, sensate, or intuitive types. Consequently Jung developed eight possible psychological types: introverted thinking types, extraverted thinking types, introverted feeling types, extraverted feeling types, and so on (Stevens, p. 196).

Hirsch and Kummerow (1989) explained Jung's theory from a slightly different perspective. They saw the basic preferences in these ways: 1) energizing--how and where you get your energy, 2) attending--what you pay attention to and how you gather your information, 3) deciding--how you go about making decisions, and 4) living--what type of life you adopt. Hirsch and Kummerow (1989) then divide the energizing preference into introversion (I) or extroversion (E). Introverts draw their energy from the inner world of ideas, emotions, and impressions. Extroverts draw their energy from outside themselves such as from people, activities, and things.

The attending preference was divided into sensing (S) and intuition (N). Sensing refers to paying attention to information that is received directly from the five senses, to what is real. Intuition refers to paying attention to what could be rather than what is.

The deciding preference was divided into thinking (T) and feeling (F). Thinking is a preference for organizing information in logical, objective ways. Feeling is organizing information based on a personal, values-oriented way.

The living preferences are judgment (J) and perception (P). Judgment is a preference for living in a planned and organized way. Perception is preference for living in a spontaneous and flexible way.

The Myers-Briggs Type Indicator (MBTI) has been correlated with a wide variety of occupations, individuals and groups of people. One focus of the Center for Assessment and Psychological Type has been the gathering of data about the relationship of the MBTI to leadership. "Type theory suggests that individuals have different patterns of interest and effectiveness in...leadership" (McCaulley, 1990a, p. 381). All personality types become leaders, but someone may be effective in one position and not another. If the traits needed to be an effective leader in a given situation are known, then the MBTI might serve as a useful tool to predict success.

The MBTI questions force choices between E or I, S or N, T or F, and J or P. Scores generated from answers to the MBTI show the direction of preference by a letter, and the consistency of preference by a number (example E 29, T 15, etc.). The traits are denoted by four letters reflecting the direction of the preference--ESTJ, INTP, ENFJ, and so forth. Myers wrote descriptions for each of the 16 traits, using the developmental dynamics implicit in Jung's theory. Descriptions show the characteristics of a type at optimum development, and potential problems when development is incomplete. These descriptions are based on the theory, long years of observation, and empirical data. (McCaulley, 1990a, p. 381, 383)

In the search for the "ideal" type for a transformational leader, one would do well to note that all people possess all traits as indicated on the MBTI. However, some personality traits are better suited to the demands of being a transformational leader. Obvious traits that one would look for are (a) being a visionary, (b) looking at problems as challenges, (c) involving others in decisions, (d) being good communicators, (e) focusing on the human side of change, (f) possessing high energy, and (g) being of high moral character, among others.

Some research has already attempted to correlate type with transformational leadership. Gyskiewicz and Tullar (1995) concluded in their study that N and P traits are associated with innovative problem-solving. S, T, and J traits are more associated with low and middle level management. They found that NT's are often top level managers and many are also E's. Walck's work (1992) found that many NT's can be found in the high ranks of

corporate America. McGhee (1992) concurred in her study that NT's are the most effective change initiators. Her study also found a positive correlation between N's and high scores on vision and planning scales. This led her to suggest that the intuitive trait is an important factor in leader selection and change management. Coleman's study (1994) cited McCaulley (1990) who suggested that NF traits are the most skilled in communication and are often inspiring leaders. Coleman hypothesizes that INFP would be an ideal type to work in a school with site-based management.

A review of the research literature supports the notion that personality traits are related to leadership style. Further, certain traits are associated with transformational leaders that, if present, are more likely to bring about changes needed to restructure schools. Studies cited here confirm that the highest percentage of school principals possess the personality traits of "manager" rather than change initiator or visionary. It might not be surprising then, that the pace of reform is slow in schools because leaders are chosen who are more tied to maintaining the status quo and satisfying old managerial models. To bring deep and profound change to education, the personality traits of leaders being selected to run schools must be considered.

CHAPTER 3

METHODS AND PROCEDURES

Introduction

The purpose of this study was to investigate the relationship between the personality traits of principals and to what degree they are perceived to be transformational leaders. Data were explored both through descriptive statistical analysis and through the study of relationships among variables. The independent variable of personality type included the personality traits along the continua of introvert/extrovert, sensate/intuitive, thinking/feeling, and judging/perceiving. The dependent variable measured was the degree of transformational leadership exhibited by the principal as assessed by the teachers with whom he/she worked. Other independent variables that were measured came from background information about the principals such as years in the school, age, gender, years in education, educational level, and size of the school.

The population of the study, the instrument used, and the research method and design, are discussed in this chapter. Also included in this chapter is a description of the plan used in data gathering and data analysis.

Population

The population of this study was comprised of 1,066 North Carolina elementary public school principals. The researcher determined that "elementary school" would be defined as any school having the grades kindergarten through sixth. Schools also having a prekindergarten were included, while those having any grades above sixth were not. A multistage sampling procedure was used to identify the sample for this study. Forty school districts in North Carolina were randomly selected out of a total population of 119 districts as listed in the North Carolina Education Directory (1995-96).

The researcher expected a return rate of 50% for this study. To establish a degree of precision of 0.1, 91 packets needed to be returned (Scheaffer, Medenhall, & Ott, 1979). To compensate for the 50% rate of return, 182 packets were mailed to schools.

Instrumentation

Myers-Briggs Type Indicator is one of the most well-known personality tests. Since 1975 the "use of the Indicator has grown exponentially to the point where it will soon be the most widely-used psychological tool for 'normal people'" (McCaulley, 1990b). According to McCaulley (1990b) the MBTI has a wide range of uses including the determination of management styles.

Principals were asked to complete Form G of the Myers-Briggs Type Indicator, although they were not asked to score the measure themselves. This version asked each principal to answer 126 questions about their preferences in a "forced-choice format" (McCaulley, 1990b, . p. 101). These preferences were translated into scores along bipolar continua. Scoring high or low on the continuum indicated a preference for one personality trait over another. For example, respondents were asked to respond to word pairs with the instructions, "Which word appeals to you?" The choices were always in the same preference (E or I, S or N, T or F, and J or P).

MBTI theory assumes a dichotomy for each preference; thus, data are displayed on either side of a midpoint as E 19 on one side or I 19 on the other. For research purposes, the convention is to treat the dichotomies as if there were an underlying continuum...When MBTI continuous scores are correlated with scale scores from other instruments, negative correlations indicate an association between the other measures and E, S, T or J; positive correlations indicate a correlation between the other measures and MBTI I, N, F, or P. (McCaulley, 1990b, p. 102)

Since the nature of the MBTI is to provide information about the 16 "types" into which one can be classified, the normative data that is available is in relation to these. McCaulley (1990b) states that construct validity has been demonstrated for career choice, academic success, learning and teaching styles, correlations with other personality measures, correlations with behavior ratings, and self agreement.

correlations with behavior ratings, and self agreement. Although the MBTI has been used to assess management and leadership style, not enough research has been completed to determine construct validity in these areas. Part of the need for this research project is to see if any relationship exists.

Internal consistency and test-retest reliabilities of the MBTI for the preferences of EI, SN, TF, and JP are reported using correlations of continuous scores. However, because the underlying theory of the MBTI is that one is a "type" and not a "score" or degree of a type, then reliability data is presented on the letter preferences and not scores as seen in Table 1.

Further data on the MBTI show a 42% chance of getting the same four letter type on a retest of the MBTI; 78% of samples indicate a chance of three of four letter types being the same. In less than 1% of cases reported, did someone change all four letter types on a retest (McCaulley, 1990b).

The Nature of School Leadership (also referred to as Nature of Leadership) was a questionnaire developed, in part, by Kenneth Leithwood at the Centre for Leadership Development, Ontario Institute for Studies in Education

TABLE 1
RELIABILITY OF FORM G, MBTI

Sample	<u>Internal Consistency</u>			
	<u>Preference Type</u>			
	E/I	S/N	T/F	J/P
All Persons	.82	.84	.83	.86
Form G				
(N=32,671)				
Adult College	.83	.89	.86	.88
Graduates				
(N=5,584)				
Sample	<u>Test Retest</u>			
Elementary	.83	.89	.90	.90
Teachers (N=94)				

Note. From the MBTI Data Bank
Myers, I. B., & McCaulley, M. H. (1985). Manual: A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press, p. 166.

(see Appendix A). This instrument, released in June 1995, has been used by Leithwood and other researchers in Canada, the United States, Hong Kong, and Australia. On this questionnaire respondents were asked to answer each question using a Likert-type scale. Scores were tallied so that each questionnaire yielded an overall score from 50 to 300; the higher the score the more transformational in leadership style.

Categories were built into the questionnaire that measured the following transformational leadership traits: 1) purpose of leadership, 2) interaction with people, 3) strengthening of the school culture, and 4) building collaborative structures (see Table 2). These categories included one question serving as a check. It was phrased negatively with the scoring done in a reversed manner to identify those who might score all questions the same.

Within each category, subscales measured traits defined by the instrument as components of transformational leadership. The categories and subscales with their respective Cronbach's alpha reliability coefficients are located in Table 2. It is reported that the mean for transformational leadership has an internal consistency of .97.

TABLE 2
LEADERSHIP TRAITS MEASURED BY THE NATURE OF SCHOOL
LEADERSHIP

<u>Category</u>	<u>Trait</u>	<u>Internal Consistency Cronbach's alpha</u>
Purpose	Develops a vision for the school	.89
	Builds consensus around school goals and priorities	.80
	Holds high perform- ance expectations	.76
People	Models behavior	.90
	Provides individ- ualized support	.84
	Provides intellect- ual support	.92
Strengthens School Culture		.90
Builds Collaborative Structures		.86

Research Methodology and Design

To obtain necessary data for this study, the researcher randomly selected 37 public elementary school districts in North Carolina. Within each district packets were mailed to five randomly selected schools. Principals of these 185 schools received a packet containing a brief letter of introduction to the researcher and to the study (see Appendix B). The principals were asked to complete Form G of the Myers-Briggs Type Indicator. They were also asked to complete a background information questionnaire (see Appendix C). The principals were assured anonymity regarding their responses.

Included with the letter of introduction was the request that five teachers be randomly chosen from the staff within the school. Principals were asked to take a listing of the certified staff, divide that number by five, and then give a survey to every nth staff member up to five. These teachers were given an envelope containing The Nature of School Leadership survey (see Appendix A) and an introductory letter from the researcher (see Appendix D). They were asked to return the completed survey in a sealed envelope to the principal. A self-addressed, stamped envelope was also included for returning the packet. Before mailing, each packet was coded so responses from each school could be identified. Because the MBTI test booklets were leased, the

Because the MBTI test booklets were leased, the researcher asked principals to return the booklets even if they were not going to respond to the study.

Two weeks after the initial mailing only 33 completed packets had been returned and 19 uncompleted packets were returned. Most principals not participating stated they did not want to further burden their already busy teachers. A postcard was mailed to all principals who had not responded. The purpose of the postcard was to serve as a reminder. A third follow up was made two weeks later by telephoning those who had not yet responded. Seven weeks after the initial mailing, 74 completed packets had been returned and the research moved to data analysis. This represented a 40% return rate, 10% less than expected.

Data Analysis

As packets were returned they were monitored for completeness. A number of principals returned less than five teacher surveys. These were included in the research as long as at least two surveys had been completed. In a few cases the principal forgot to complete the MBTI or the background information questionnaire. These were returned to the principal with a short note; they then quickly responded. The packets were also consecutively numbered as they were received in the event any relevant data may be gleaned from this information.

The MBTI were hand scored using overlays provided by the company. Five overlays were used; one overlay scored the extrovert/introvert trait; one overlay scored the sensate/intuitive trait; two overlays scored the thinking/feeling trait, one for males and one for females; and one overlay scored the judging/perceiving trait. Scoring charts on each overlay guided the researcher to determine the proper personality type for each subject. Both the individual trait scores and the overall type scores were noted on each answer sheet.

The MBTI answer sheet was then attached to the background information sheet and to the transformational leadership surveys. Responses to The Nature of School Leadership were tallied for each school. This gave an overall average score per question and for each subscale the average scores per question were added. This gave an overall subscale score per school. This procedure eliminated the potential problem caused by incomplete responses on teacher questionnaires.

Descriptive statistics, the chi-square statistic, analysis of variance and correlational statistics were used to analyze the data in this study. To expedite data analysis, SPSS 6.1 for Windows Student Version (1994) statistical computer software and The Selection Ratio Type Table PC Program (Granade, Hatfield, Smith & Beasley, 1987) were used to analyze data. In this study descriptive statistics and the chi-square statistic were

used to ascertain if the sample differed significantly in relation to their personality type from the general population and from previous samples of school principals. Descriptive statistics were also used to describe the study sample in terms of their age, gender, years in the school, years as an educator, educational level, and size of the school. In entering data into the database, age, years in school, years as an educator, and size of school were ordinal numbers. Gender was represented as male equal to zero and female equal to one. Educational level was represented as follows: one for a bachelor's degree, two for a master's degree, three for an educational specialist degree, and four for a doctorate degree.

Inferential statistics, namely analysis of variance of the mean, the chi-square statistic, correlational studies, and multiple regression analysis, were used to explore relationships among variables in this study. The study examined the degree of the relationship between the independent variables of personality trait and demographics, and the dependent variable of leadership style. The design used a cross-sectional survey methodology that relied upon a survey instrument and a personality type questionnaire. The purpose of this design was to correlate scores on the traits of the personality test with scores on responses to questions about leadership style.

CHAPTER 4

RESULTS

Introduction

This chapter reports the analysis of data gathered and addresses how the data answer the research questions focusing this study. Discussion of these findings will take place in Chapter Five.

Demographic data will first be reviewed. Following that, descriptive statistics are used to analyze principals' Myers-Briggs Personality Type Indicator results as well as their transformational leadership scores. Finally an analysis of the research questions and null hypotheses is presented.

Demographic Data

North Carolina principals participating in this study were asked to complete a background information questionnaire. They were asked to provide personal, professional and career related information (see Appendix C). When asked about their length of service in their present school, it was determined that the sample of principals in this study were relatively newcomers with 18.9% of the respondents in their first year (see Table

was from first year to 29th, with a mean of 6.35 years and a mode of 1.00 years.

The average age of this sample was 48.37 years and the mode was quite similar at 48.00 years. The range in age was from 37 years old to 65 years old. MacKenzie & Keith (1991) found the average age of their sample in Colorado to be 44 years, Richardson, Flanigan, & Cline (1989) found in their Kentucky study of elementary school principals that the average age was 46.08 years. Doud (1988) in a NAESP study of K-8 principals also found a younger average age than this sample of North Carolina elementary principals. The average age in Doud's study was 47 years.

The majority of the respondents in the study were male, representing 56.76% of the sample, while females totaled 43.24%. The number of female principals in this study was much higher than the figures listed in the 1996 Digest of Educational Statistics reporting that only 35% of principals nationwide are women. However, the numbers of female principals nationwide may be higher in the elementary school since the Education Vital Statistics listed in the 1995 issue of The American School Board Journal report that 42.10% of elementary principals nationwide are women.

The numbers of years the principals had been in education ranged from 12 to 38, with 27 years representing the mode with a mean of 25.37 years. Only 1.40% of the principals had a bachelor's degree, while 58.00% had achieved a master's degree, 36.50% had achieved an educational specialist's degree, and 4% had achieved a doctorate degree. The sample group had a higher percentage of principals with an educational specialist's degree than is reported in other studies and statistical reports, but fewer principals with doctorate degrees (see Table 3). These differences were not, however, statistically significant.

Principals in the study came from a range of school sizes. The smallest elementary school had an enrollment of 155 pupils, while the largest had 1,060 pupils. The mean school size for the sample was 496.70 and the mode was 500.

Instrument Validity

The correlations between subscales of The Nature of School Leadership and the overall transformational leadership score are found in Table 4. The subscale scores correlated highly with transformational leadership. As shown in Table 5, a positive correlation existed among the subscales themselves. This indicates

there may be an overlap in the subcategories with reference to what they are measuring.

TABLE 3
Comparison of Principals' Highest Degree

<u>Study</u>	<u>Highest Degree Completed</u>			
	<u>BA/BS</u>	<u>MA/MS</u>	<u>Ed.S.</u>	<u>Ed.D.</u>
Sample	1.40%	58.00%	36.50%	4.00%
1993-94 National				
Statistics *	1.40%	63.40%	25.80%	9.30%
1995 Vital				
Statistics**	0.00%	65.00	23.80%	10.50%

*Note. U.S. Department of Education. National Center for Education Statistics. Digest of Educational Statistics 1996, NCES 96-133, by Thomas D. Snyder. Production Manager, Charlene M. Hoffman, Program Analyst, Claire M. Geddes. Washington, DC: 1996. Table 86: Principals in public and private elementary and secondary schools, by selected characteristics: 1993-94.

**Note. "Education Vital Statistics" for elementary school principals. The American School Board Journal (1995), 11(11), p. A20.

TABLE 4
CORRELATION OF SCORES ON THE SUBSCALES OF THE NATURE OF
SCHOOL LEADERSHIP WITH TRANSFORMATIONAL LEADERSHIP
SCORES*

<u>Subscales</u>	<u>Observed</u>
Develops Vision	.89
Builds Consensus	.85
Holds High Performance Expectations	.79
Models Behavior	.90
Provides Individualized Support	.78
Provides Intellectual Stimulation	.90
Strengthens School Culture	.91
Builds Collaborative Structures	.76
N=74	

* Spearman Rank Order Correlation Coefficients

TABLE 5
CORRELATION AMONG THE NATURE OF SCHOOL LEADERSHIP
SUBSCALES*

	Consen	Cultur	Hi-Exp	Supprt	Intell	Models	Vision
Collab	.72	.69	.59	.65	.65	.72	.67
Consen		.82	.79	.67	.77	.81	.80
Cultur			.72	.82	.84	.90	.82
Hi-Exp				.55	.79	.78	.75
Supprt					.70	.76	.60
Intell						.84	.84
Models							.82
N=74							

* Spearman Rank Order Correlation Coefficients

Results of Research Questions and Hypothoses

The following section presents the research questions and hypotheses along with accompanying data. In many instances, tables are provided to clarify the information.

Research Question One

Research Question One investigated the percentage of MBTI types in the sample compared to percentages of other groups of principals who had taken the MBTI. To obtain this information a simple frequency distribution was

calculated for the sample. Then the percentages were compared as outlined in Table 6. The data suggests that over twice as many principals in the sample reported themselves to be ISTJ's (27%) than are found in the MBTI Data Bank (12.5%). Using the SRTT computer program provided by the Center for Applications of Psychological Type, the chi-square statistic was calculated when cell sizes were sufficiently large. A Fisher's exact probability test was calculated when cell sizes were too small to compute chi square values. The overrepresentation of ISTJ's was found to be significant.

The same result was obtained when the sample was compared to another group of elementary and secondary school principals who had taken the MBTI. Using the SRTT computer program, sample percentages were compared with the Lynch Study. The Lynch Study included the MBTI results of 276 North Carolina public school principals who had taken the test during the years of 1984-86. These results showed the two samples of North Carolina principals were similar in all but two MBTI types. This study sample differed significantly from the Lynch Study in the personality types of INFP and ESTJ. This study had and overrepresentation of the INFP types and and underrepresentation of the ESTJ types (see Table 7).

TABLE 6
COMPARISONS OF SAMPLE MYERS-BRIGGS PERSONALITY TYPES WITH
MBTI DATA BANK

Percentages of Personality Type			
	<u>Sample</u>	<u>MBTI Data Bank</u>	<u>Test Statistic</u>
	N=74	N=1,024	
ENFJ	2.7	8.4	(0.12) ^a
ENFP	2.7	9.3	(0.06) ^a
ENTJ	10.8	8.6	0.43 ^b
ENTP	5.4	3.7	(0.52) ^a
ESFJ	5.4	10.6	(0.17) ^a
ESFP	1.4	2.7	(0.72) ^a
ESTJ	12.2	13.2	0.06 ^b
INFJ	1.4	3.9	(0.36) ^a
INFP	5.4	5.4	(1.00) ^a
INTJ	6.8	5.3	(0.59) ^a
INTP	4.1	2.5	(0.44) ^a
ISFJ	8.1	7.4	(0.05) ^a
ISFP	4.1	2.6	(0.72) ^a
ISTJ	27.0	12.5	12.49 ^{b***}
ISTP	2.7	1.5	(0.62) ^a
ESTP	0.0	2.4	(0.25) ^a

***p<.001

^a=Fisher's exact probability

^b=Calculated chi square

Note. Data are from the MBTI Data Bank and include educators who described themselves as administrators at the elementary and secondary school level

Source: Myers, I. B., & McCaulley, M. H. (1985). Manual: A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press. Macdaid, G. P., McCaulley, M. H., & Kainz, R. I. (1986).

TABLE 7

COMPARISON OF PERCENT OF MBTI TYPES WITH THE LYNCH STUDY

Percentages of Personality Type			
	<u>Sample</u>	<u>Lynch Study</u>	<u>Test Statistic</u>
	N=74	N=276	
ENFJ	2.7	2.5	(1.00) ^a
ENFP	2.7	2.2	(1.00) ^a
ENTJ	10.8	10.1	0.03 ^b
ENTP	5.4	1.5	(0.07) ^a
ESFJ	5.4	5.4	(1.00) ^a
ESFP	1.4	1.8	(1.00) ^a
ESTJ	12.2	26.1	6.36 ^{b*}
INFJ	1.4	2.2	(1.00) ^a
INFP	5.4	1.1	(0.04) ^{a*}
INTJ	6.8	8.7	(0.65) ^a
INTP	4.1	1.1	(0.11) ^a
ISFJ	8.1	4.7	1.31 ^b
ISFP	4.1	2.5	(0.07) ^a
ISTJ	27.0	25.4	0.08 ^b
ISTP	2.7	2.5	(1.00) ^a
ESTP	0.0	2.2	(0.35) ^a

* $p < .05$

^a=Fisher's exact probability

^b=Calculated chi square

Note. Data are from those who described themselves as principals at the elementary and secondary level from the study of Ronald G. Lynch of The Institute of Government, University of North Carolina at Chapel Hill, 1984-86 who administered to them Form F of the MBTI.

Source: Macdaid, G. P., McCaulley, M. H., & Kainz, R. I. (1986). Myers-Briggs Type Indicator Atlas of Type Tables (vol. 1). Gainesville, FL: Center for the Application of Psychological Type, Inc.

Null Hypothesis One

Hypothesis One stated that there is no significant difference between Myers-Briggs Personality Type of North Carolina Elementary Principals and other groups of principals who have taken the MBTI. Based on the findings of this study there were significant differences when this sample was compared to an earlier sample of North Carolina elementary public school principals, and when compared to elementary and secondary principals in the MBTI Data Bank. Therefore the null hypothesis is rejected. This study contained higher proportions of ISTJ's compared to a national sample. It also contained a lower proportion of ESTJ's than an earlier North Carolina study, but a higher proportion of INFP's.

Research Question Two

Research Question Two focused on the differences in transformational leadership scores of individuals of different type. To analyze this information, the 15 types evidenced by the sample were compared by their scores on The Nature of School Leadership. The overall mean for transformational leadership was 240.15 out of a possible score of 300. ENFJ's had the lowest mean score of 214.0, while INFJ's had the highest mean of 275.8. Most types had large standard deviations indicating variability among types on this measure of transformational

leadership. ENTP's had the least amount of variability among scores for a single type. The two categories with a single respondent were dropped from the analysis of variance that tested differences between transformational leadership means of principals with different types.

The ANOVA results are listed in Table 8. They show there is no significant difference among the transformational leadership mean scores for principals with different types.

TABLE 8
ANALYSIS OF VARIANCE IN SCORES ON TRANSFORMATIONAL
LEADERSHIP BY MBTI TYPE

Source	DF	SS	MS	F
Between Groups	12	8170.84	680.90	.92
Within Groups	59	43786.42	742.14	
Total	71	51957.26		

Null Hypothesis Two

Hypothesis Two stated there was no difference between the Myers-Briggs Personality Types and transformational leadership mean scores. Based on the ANOVA results there is no significant relationship among these variables. Hypothesis Two, therefore, is retained.

Research Question Three

Research question three focused on the relationship between the MBTI traits and transformational leadership. To analyze this data, bipolar trait scores (extrovert/introvert, sensate/intuitive, thinking/feeling, and judging/perceiving) were converted into continuous scores as outlined in the MBTI manual (Myers & McCaulley, 1985). To accomplish this, the continuous score is 100 minus the obtained score for the E, S, T, or J preferences. Likewise, the continuous score is 100 plus the obtained score for I, N, F, or P.

These bipolar scores were subjected to a multiple regression analysis. Only one MBTI bipolar trait, thinking/feeling, had a significant correlation to transformational leadership with a standardized beta value of -0.28. Scores approaching +1 indicate a strong feeling trait, whereas scores approaching -1 indicate a strong thinking trait. The negative value indicated that thinking was the more significant trait, since the continuous scores measured the degree of feeling for each principal (see Table 9). As another check to this finding, the mean scores of those principals with a feeling type were compared with the mean score of those principals who had been assessed as a thinking type. The mean for the feeling types equaled 231.8, whereas the mean for the thinking types equaled 244.8. This supported

the finding that those who had a preference for the thinking trait scored higher on the transformational leadership scale.

TABLE 9
AN ANALYSIS OF THE MBTI BIPOLAR TRAITS AND THEIR
EFFECT ON TRANSFORMATIONAL LEADERSHIP SCORES

Independent Variable	<u>b</u>	Beta	<u>t</u>
Extrovert/Introvert	-0.17	-0.18	-1.52
Sensate/Intuitive	-0.04	-0.04	-0.35
Thinking/Feeling	-0.31	-0.28	-2.30*
Judging/Perceiving	0.11	0.11	0.84
<u>R</u> ² = 0.09, <u>F</u> = 1.71			

*p < .05

Null Hypothesis Three

Hypothesis Three stated that there would be no relationship between the Myers-Briggs bipolar continuum scores of personality traits and transformational leadership total scores. Based on the data collected, a significant relationship was shown between the thinking/feeling trait and transformational leadership. This null hypothesis was rejected for the thinking/feeling trait. It was not rejected for the

extrovert/introvert, sensate/intuitive and judging/perceiving traits.

Research Question Four

Research Question Four explored the relationship among the demographic factors, the MBTI traits and transformational leadership. To analyze these factors the researcher first looked at the demographic factors and compared them to the transformational leadership scores on The Nature of School Leadership. Then the same was done for the bipolar traits of the MBTI. Finally, those significant factors were further analyzed.

A correlation of the demographic variables found that only about 14.5% of the variance in scores of transformational leadership could be attributed to demographics. Of this variability, 11.5% was attributed to gender (see Table 10).

Since gender appeared to be a significant factor, it was explored more fully. The means were compared for both males and females. The mean transformational leadership score for males was 232.17; for females it was 250.62. These means were compared using a two-tailed t-test and the difference was found to be significant at $p < .01$ (see Table 11).

TABLE 10
RELATIONSHIP OF DEMOGRAPHIC DATA WITH LEVEL OF
TRANSFORMATIONAL LEADERSHIP

	<u>r</u>	<u>r²</u>
<u>Demographic Data</u>		
Years at Present School	-.086	.007
Age	-.089	.008
Gender	.339	.115
Years in Education	-.031	.001
Highest Education Level	-.038	.001
School Size	-.060	.004

TABLE 11
THE EFFECTS OF GENDER ON TRANSFORMATIONAL LEADERSHIP
SCORES OF SAMPLE

<u>Gender</u>	<u>N</u>	<u>M</u>	<u>SD</u>	<u>t-value</u>
Male	42	232.17	27.22	3.06**
Female	32	250.62	23.63	

**p<.01, two-tailed.

The demographic variable of gender was then added to a multiple regression model also incorporating the MBTI bipolar traits. The purpose of this analysis was to determine if both gender and thinking/feeling were significant variables in transformational leadership. The results showed that gender was the most significant factor, but that the thinking/feeling trait remained a significant variable as well (see Table 12).

TABLE 12
MULTIPLE REGRESSION ANALYSIS OF GENDER AND
THINKING/FEELING TRAIT ON TRANSFORMATIONAL LEADERSHIP

<u>Independent Variable</u>	<u>b</u>	<u>Beta</u>	<u>t</u>
Thinking/Feeling	-.28	-.25	2.30*
Gender	18.99	.35	3.23***
<u>R²=.18, F=7.58*</u>			

*p<.05 ***p<.001

To further explore the relationship among gender, the thinking/feeling trait, and transformational leadership, a t-test was used to examine the mean scores between male thinkers and female thinkers on The Nature of School Leadership. These results showed that female thinkers scored significantly higher ($p<.01$) than male thinkers on this instrument (see Table 13). Being female then, was a

stronger variable than being male when the thinking trait was held constant. The same was not true when comparing the means of the scores on transformational leadership for male feelers and female feelers. In this case gender was not a significant factor.

TABLE 13

A COMPARISON OF TRANSFORMATIONAL LEADERSHIP SCORES OF
MALES POSSESSING THE THINKING TRAIT WITH FEMALES
POSSESSING THE THINKING TRAIT

t-test for independent samples			
<u>Independent Variable</u>	<u>Cases</u>	<u>Mean</u>	<u>SD</u>
Male	(30)	238.41	23.27
Female	(21)	253.19	24.54
<u>F</u> = .075 <u>p</u> = .786			
t-test for equality of means			
<u>Variances</u>	<u>t-value</u>	<u>df</u>	<u>2-tail Sig</u>
Equal	-2.18	49	.03*

*p<.05

Null Hypothesis Four

Hypothesis Four stated there would be no relationship among demographic factors, and MBTI traits and total

score of transformational leadership as measured on the The Nature of School Leadership. Based on the findings listed above cause the null hypothesis of this statement to be rejected. Both gender and the thinking/feeling trait were found to have a significant relationship with transformational leadership.

Summary

The data in this study supported both gender (being female) and the thinking trait to have a statistically significant relationship with scores on The Nature of School Leadership. However those two variables in combination only explain 18% of the variation in scores on transformational leadership. A weak argument can be made supporting the finding that teachers who had a female thinking type principal were more likely to perceive that principal as a transformational leader. The data did not suggest, however, that transformational leadership could be predicted by personality type.

CHAPTER 5

DISCUSSION OF RESULTS

Introduction

This chapter serves as an opportunity to move beyond the data. Following the suggestions of Rudestam and Newton (1992), findings from the data will be integrated with existing theory and research. The following elements are contained in this chapter: a) an overview of significant findings of the study; b) a consideration of these findings with regard to existing research studies; c) implications of the study for current research; d) a thorough investigation of the findings that failed to support the hypotheses; e) limitations of the study that may have affected its results; and f) recommendations for further research.

Overview of Significant Findings

The major findings of this study centered around two factors that influenced the perceived degree of transformational leadership exercised by building level elementary school principals in North Carolina. The only two factors showing a significant correlation to transformational leadership were gender and the thinking/feeling trait. In this study, being female and

possessing a thinking personality trait were influential factors in scoring high on The Nature of School Leadership.

In addition it was discovered that the North Carolina Elementary School Principals in this study, differed significantly from other principals whose MBTI's are stored in the Data Bank. The principals in the study were significantly over represented by ISTJ types, and significantly under represented by those possessing the NF temperament.

Relation to Current Research

The concept of transformational leadership has not been extensively researched. Current educators even disagree about the qualities of transformational leadership. Studies of Barstow (1992) and McGhee (1992) both centered on leadership and personality style and served as a basis for this study. Barstow focused on the Educational Administrator Effectiveness Profile (EAEP) to assess leadership. McGhee used the Change Facilitator Style Questionnaire to assess leadership. They both used the MBTI to assess personality traits.

Barstow found little relationship between personality type on the MBTI and administrator effectiveness as measured by the EAEP. He further stated that the EAEP as

an instrument measuring leadership did not discriminate well among various leadership tasks. McGhee also found no significant relationship between the MBTI types and change facilitator styles. In her study, McGhee did find that the demographic variables of age and gender were significant to change facilitator style, whereas years of teaching and race were not. Overall, however, the MBTI was not a predictor of being a change facilitator.

Findings in this present study support earlier studies of Barstow (1992) and McGhee (1992). There does not appear to be a strong link between the personality traits as presented by the MBTI and leadership style. The only relationships found in this study were between the thinking trait and transformational leadership, as well as the even stronger linkage with gender. Neither this study nor those of Barstow and McGhee found personality to be predictor of leadership style.

Implications for Current Research

McCaulley (1990a) would not be surprised by the findings of this study. She stresses her belief that all personality types become leaders. For McCaulley, leadership involves: 1) being able to decide, 2) being right, and 3) being able to convince others of one's rightness. McCaulley does not hold that any one personality type embraces all three of these

characteristics. Indeed, a combination of personality traits must be at work for a leader to be effective.

Unsupporting Data

The researcher expected to find that intuition would play a major role in transformational leadership. The quality of being visionary highly correlates with transformational leadership (Bass, 1985; Follman, Vedros, & Curry, 1993; Kagan, 1994; Leithwood et al., 1993; Murphy & Lewis, 1994; Wilkes, 1994; Sagor, 1992). McCaulley (1990a) writes that, when one looks at the data for the 500 top executives and rising stars in education, intuitive types are the majority. Consequently, one would think that those principals perceived by their teachers as being transformational would be of the intuitive personality trait. This study did not support this.

Agor (1991), Coleman (1994), and McCaulley (1990a) state that intuitive types are better at bringing about change in organizations. Thinking intuitives are more likely to bring about sweeping changes, while feeling intuitives would be better at handling the human factors of change (McCaulley, 1990a).

Upon closer examination some trends appear in the present study to support both the importance of intuition and feeling in transformational leadership. These factors emerge when the upper quartile (top 25%) of scores from The Nature of School Leadership are examined. Since the

instrument measured transformational leadership on a continuum from no transformational leadership qualities to high transformational leadership qualities, it can be assumed that those principals scoring in the top 25% on The Nature of School Leadership are perceived as strong transformational leaders by their teachers. In the top quartile, only 10 of the MBTI types were represented. There were no ENTP's, ESFJ's, INFP's, ESTP's, ISFJ's, and ISTP's.

Hirsh and Kummerow (1989) state that ENTP's, although skilled in generating enthusiasm for a new approach, do not use a hands-on style of leadership. ESFJ's concentrate on relationships, often at the expense of tasks. They are hard workers, and expect others to work as hard as they do. INFP's have a leadership style which Hirsh and Kummerow (1989) call "subtle, gentle, indirect and inclusive of others" (p. 189). ESTP's like to take charge and are direct and assertive. They are the doers who dislike time spent on discussion and consensus. ISFJ's are hesitant to take leadership roles and only do so out of a sense of responsibility. Finally, ISTP's lead through action and adopt a loose managerial style with little supervision.

This study confirms that the ISTJ type is very common among North Carolina public school elementary schools. In a telephone interview, Saudra Van Sant, who has administrated the MBTI to over 1,000 North Carolina

principals in the last 10 years, stated she believes that the STJ type is a prevalent type for one of two reasons. One reason is that North Carolina is a very bureaucratic, top-down, state run educational system which would favor someone who likes to maintain the status quo. Another reason may be that the STJ's self-select because they prefer a bureaucratic atmosphere (personal communication, February 26, 1996). In this study, ISTJ's and ESTJ's composed 39.2% of the sample. Overselection of ISTJ and ESTJ types could serve as a hindrance to school reform.

Limitations of this Study

One of the instruments used in this study, The Nature of School Leadership, may have been a limiting factor. Like other measures that purport to measure leadership, it is a very difficult area to gauge (Barstow, 1992; McGhee, 1992). Although The Nature of School Leadership had good internal validity among its subscales, the high correlations among the subscales suggest that all the subscales were measuring the same quality. This may be one explanation for the lack of significant results with personality traits.

The MBTI itself, may also be another limiting factor in leadership studies. While the MBTI Data Bank can provide some information on the personality types of groups of leaders, it is not a predictive instrument. In

addition, McCaulley's (1990a) admonition that good leaders possess and use all the traits effectively, may limit the use of this instrument in leadership studies.

Recommendations for Further Research

One aspect of this study that was also an implication in McGhee's (1992) study, centers around the demographic factor of gender. In both studies, gender was significantly correlated with leadership. In this study females had significantly higher scores on transformational leadership than males. This may be an area to be researched further. One might look more closely at the identified traits of transformational leadership to see if any are traits that females more easily nurture, or if they are traits more culturally acceptable in females.

In this study the researcher noted that a majority of the principals were males, even though an overwhelming percentage of females are engaged as teachers in the elementary schools. A study of leadership style of male elementary principals versus female elementary principals may also be of interest. Gender selection preferences is another area in need of further study. It would be of interest to study the deciding factors of why one gender is chosen over another, and whether these factors are

related to the desired leadership style sought at a school, or whether state or local mandates favor one gender over another.

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APPENDICES

APPENDIX A

The Nature of School Leadership

NATURE OF LEADERSHIP

The following statements are intended to describe the leadership style of the person(s) providing leadership in your school. Indicate the extent to which you agree or disagree with each statement by marking the appropriate number in the space provided. For each statement, you are asked to report by circling the appropriate number, 1 through 6.

To what extent do you agree that the person(s) providing leadership in your school:

3. What extent do you agree that the person(s) providing leadership in your school:		Strongly Disagree			Strongly Agree		
1. Excites us with visions of what we may be able to accomplish if we work together to change our practices/programs.....	1	2	3	4	5	6	
2. Regularly encourages us to evaluate our progress toward achieving school goals.....	1	2	3	4	5	6	
3. Rarely takes our opinion into account when making decisions.....	1	2	3	4	5	6	
4. Leads by 'doing' rather than simply by 'telling'.....	1	2	3	4	5	6	
5. Provides resources to support my professional development.....	1	2	3	4	5	6	
6. Encourages me to reexamine some basic assumptions I have about my work.....	1	2	3	4	5	6	
7. Gives high priority to developing within the school a shared set of values, beliefs and attitudes related to teaching and learning.....	1	2	3	4	5	6	
8. Distributes leadership broadly among the staff, representing various viewpoints in leadership positions.....	1	2	3	4	5	6	
9. Has high expectations for us as professionals.....	1	2	3	4	5	6	
10. Maintains a very low profile.....	1	2	3	4	5	6	
11. Provides staff with a process through which we generate school goals.....	1	2	3	4	5	6	
12. Is a source of new ideas for my professional learning.....	1	2	3	4	5	6	
13. Holds high expectations for students.....	1	2	3	4	5	6	
14. Gives us a sense of overall purpose.....	1	2	3	4	5	6	
15. Takes my opinion into consideration when initiating actions that affect my work.....	1	2	3	4	5	6	

Nature of Leadership (Cont'd)

To what extent do you agree that the person(s) providing leadership in your school:

	<i>Strongly Disagree</i>			<i>Strongly - Agree</i>		
16. Shows respect for staff by treating us as professionals.....	1	2	3	4	5	6
17. Stimulates me to think about what I am doing for my students.....	1	2	3	4	5	6
18. Ensures that we have adequate involvement in decision making related to programs and instruction.....	1	2	3	4	5	6
19. Supports an effective committee structure for decision making.....	1	2	3	4	5	6
20. Makes an effort to know students (e.g., visits classrooms, acknowledges their efforts).....	1	2	3	4	5	6
21. Sets a respectful tone for interaction with students.....	1	2	3	4	5	6
22. Encourages me to pursue my own goals for professional learning.....	1	2	3	4	5	6
23. Encourages ongoing teacher collaboration for implementing new programs and practices.....	1	2	3	4	5	6
24. Helps clarify the specific meaning of the school's vision in terms of its practical implications for programs and instruction.....	1	2	3	4	5	6
25. Encourages us to develop/review individual professional growth goals consistent with school goals and priorities.....	1	2	3	4	5	6
26. Expects us to engage in ongoing professional growth.....	1	2	3	4	5	6
27. Displays energy and enthusiasm for own work.....	1	2	3	4	5	6
28. Lacks awareness of my unique needs and expertise.....	1	2	3	4	5	6
29. Encourages us to evaluate our practices and refine them as needed.....	1	2	3	4	5	6
30. Expects us to be effective innovators.....	1	2	3	4	5	6
31. Demonstrates a willingness to change own practices in light of new understandings.....	1	2	3	4	5	6
32. Encourages me to try new practices consistent with my own interests.....	1	2	3	4	5	6
33. Rarely refers to school goals when we are making decisions related to changes in programs or practices.....	1	2	3	4	5	6
34. Stimulates discussion of new ideas relevant to school directions.....	1	2	3	4	5	6
35. Facilitates effective communication among staff.....	1	2	3	4	5	6
36. Establishes working conditions that inhibit staff collaboration for professional growth and planning.....	1	2	3	4	5	6

Nature of Leadership (Cont'd)

To what extent do you agree that the person(s) providing leadership in your school:

		Strongly Disagree			Strongly Agree		
37. Communicates school vision to staff and students.....	1	2	3	4	5	6	
38. Encourages the development of school norms supporting openness to change.....	1	2	3	4	5	6	
39. Shows favoritism toward individuals or groups.....	1	2	3	4	5	6	
40. Facilitates opportunities for staff to learn from each other.....	1	2	3	4	5	6	
41. Reinforces isolation of teachers who have special expertise.....	1	2	3	4	5	6	
42. Provides an appropriate level of autonomy for us in our own decision making.....	1	2	3	4	5	6	
43. Provides moral support by making me feel appreciated for my contribution to the school.....	1	2	3	4	5	6	
44. Helps us understand the relationship between our school's vision and board or Ministry initiatives.....	1	2	3	4	5	6	
45. Models problem-solving techniques that I can readily adapt for work with colleagues and students.....	1	2	3	4	5	6	
46. Promotes an atmosphere of caring and trust among staff.....	1	2	3	4	5	6	
47. Symbolizes success and accomplishment within our profession.....	1	2	3	4	5	6	
48. Supports the <i>status quo</i> at the expense of being at the cutting edge of educational change.....	1	2	3	4	5	6	
49. Works toward whole staff consensus in establishing priorities for school goals.....	1	2	3	4	5	6	
50. Is open and genuine in dealings with staff and students.....	1	2	3	4	5	6	

APPENDIX B

Letter of Introduction to Principals

October 1996

Dear North Carolina Principal,

Please allow me to introduce myself. I am Robert McGrattan, a fellow principal in Asheville. I am also a doctoral student at East Tennessee State University in Johnson City, TN. From my own experience as a principal I know how busy life is for you. However I need your help with my research that is to be included in my dissertation.

You have been randomly selected along with about 200 other principals from around the state. The purpose of my study is to look at the correlation of personality traits with leadership style. All the information that you return to me will be kept in the strictest of confidence. At no time will any names be attached to any part of this research. You will be assured of anonymity.

Included in this packet are the following:

- 1) A "Background" questionnaire for you to complete.
- 2) A copy of the Myers-Briggs Type Indicator test booklet and answer sheet for you to complete.
- 3) Five envelopes for 5 teachers marked "teacher surveys" which you are to distribute to teachers as outlined below.
- 4) A large, self-addressed manila envelope in which to place the MBTI test booklet and answer sheet and the 5 sealed envelopes from teachers.

As you select the teachers to participate in this study, please take the total number of your teachers and divide by five. Then take a teacher list and go down the list, marking every nth teacher, which is dependent on your answer when you divided. For example if you have 30 teachers, divide by 5 and get an answer of 6. Then go down the list of names selecting every 6th name. Do not exceed 5 teachers selected. On my behalf, please thank them for participating in the study.

It is important that this packet be returned to me within two weeks from when you receive it. A reminder postcard or telephone call may be used to remind you if I do not receive your packet within the two week deadline.

Since I am leasing the MBTI test booklets, it is very important that you return them to me in the envelope provided. Otherwise, I shall have to pay for the booklet. Also, please do not fold your MBTI answer sheet as you place it in the manila envelope.

If you have any questions about what to do, please feel to call me anytime at 704-658-0447 (home) or at 704-255-5521 (work). If you would like a summary of the results of this study, please call me.

Sincerely,

Robert J. McGrattan

APPENDIX C

Background Information Questionnaire

<p style="text-align: center;">BACKGROUND INFORMATION to be completed by principals</p>

Please answer the following questions that will provide important background information for this study. Thank you

1. How many years have you been at your present school? _____

2. Your age: _____

3. Your gender:

_____ male
_____ female

4. How many years have you been in education? _____

5. What is your highest educational level? _____

6. How many students are enrolled in your school? _____

APPENDIX D

Letter of Introduction to Teachers

7 High Country Road
Weaverville, NC, 28787

September 1996

Dear Teacher,

Your school has been randomly selected to participate in a research project as part of my doctoral dissertation. The purpose of my study is to learn whether there is any correlation between the personality traits of principals and their leadership style.

For your part, I need you to complete a survey instrument. It is called The Nature of Leadership. When you are completing it please reflect on the leadership traits of your current principal and the current status of your school.

When you have completed the survey (it should take about 15 minutes), please put it in the envelope provided by the principal and seal it. Then return it to your principal as quickly as possible. I must have all the material mailed back to me within two weeks.

As an educator and former teacher I am well aware how precious your time is. I am very grateful that you are willing to share some of it with me. Thank you.

Sincerely,

Robert J. McGrattan

VITA

ROBERT J. MCGRATTAN

Education: Public Schools, Perth, New York
Siena College, Loudonville, New York;
history/education, B.A., 1974
The College of St. Rose, Albany, New
York; reading, M.S., 1978
Western Carolina University,
Cullowhee, North Carolina;
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East Tennessee State University,
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Professional

Experience: Chapter I Teacher, Aycock Elementary
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Assistant Principal, Randolph
Elementary School; Asheville,
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